Remarks

The Applicants note with appreciation the indication that Claims 3-8 would be allowable if rewritten 1) to overcome the rejection under 35 U.S.C. §112 and 2) into independent form. Those claims have been cancelled and replaced by Claims 17-22, respectively. Appropriate antecedent basis has been provided with respect to "the wall" as helpfully suggested by the Examiner. Confirmation of allowability is respectfully requested.

The Applicants acknowledge the objection to the drawings. Figs. 4, 5, 9 and 10 have been amended in accordance with the Examiner's helpful suggestion to provide an internal wall of the engine. Also, the Applicants include a new Fig. 11 which shows a jet engine comprising a device for controlling propulsive gas mixing in accordance with aspects of the invention. Entry of the amended Figs. 4, 5, 9 and 10 as well as new Fig. 11 into the Official File is respectfully requested.

The Applicants acknowledge the Examiner's comments concerning Figs. 4 and 5 and that the trailing edge 3 appears to have remained in the same position regardless of the change in mode. The Applicants respectfully submit that the trailing edge may in fact remain in the same position irrespective of which mode is in use. Fig. 4 shows the controller in the "OFF" position which results in the less than laminar flow along the divergent edge. Fig. 5 shows the controller in the "ON" position wherein the flow is laminar with respect to trailing edge 3. This may be accomplished merely by the controller, and not by varying the position of the divergent edge. The Applicants accordingly respectfully submit Figs. 4 and 5 are indeed proper. Confirmation is respectfully requested.

The Applicants acknowledge the objections to Claims 11, 13 and 14. Those claims have been cancelled in favor of new Claims 25, 27 and 28 wherein the helpfully suggested language is now in place.

The Applicants acknowledge the rejection of Claims 1-14 under 35 U.S.C. §112 (second paragraph). Claims 1-14 have been cancelled and replaced with new Claims 15-28 respectively. Thus the objection is moot. Nonetheless, the Applicants have addressed all of the items set forth in paragraphs 5-9 on pages 3 and 4 of the Official Action in the newly added claims. For example, the Applicants have removed the reference to "an existence limit value" and have instead utilized language that states that the divergent trailing edge generates conditions of "a minimal separation" of

the primary jet from the internal wall. The minimal separation is essentially what is meant by the prior term "close to an existence limit value".

The Applicants acknowledge the rejection of Claims 1, 2 and 11-14 under 35 U.S.C. §102 as being anticipated by McAndrews. The Applicants note that that rejection is now moot in view of the cancellation Claims 1, 2 and 11-14. Nonetheless, the Applicants respectfully submit that new Claims 15, 16 and 25-28 are allowable over McAndrews. In that regard, McAndrews discloses an engine having a mechanical device to control propulsive gas mixing at an outlet of the engine. Basically, the device is intended to modify the bypass ratio, which is the flow rate of core air compared to fan air. The main goal of McAndrews is to generate a separation for the flow. However, McAndrews uses a flap 53 actionable with a control arm 80.

In sharp contrast, Claims 15, 16 and 25-28 employ a divergent trailing edge that does not move. In other words, it is fixed in a stationary position with respect to the internal wall of the nozzle. In a completely opposite way, McAndrews relies on a movable flap. Thus, the Applicants respectfully submit that McAndrews is inapplicable to Claim 15, 16 and 25-28. Withdrawal of the rejection is respectfully requested.

The Applicants acknowledge the rejection of Claims 1, 2 and 9-14 under 35 U.S.C. §102 over Koff. The Applicants note that that rejection is also moot in view of the cancellation of those claims. Nonetheless, the Applicants respectfully submit that Claims 15, 16 and 25-28 are patentable over Koff.

Koff discloses an engine that includes 2 or 3 fluxes following the position of flap 122. The principle is similar to the engine of McAndrews, wherein the by pass ration (and condition of use) is changed by the mechanically actionable flap 122. Flap 122 is a mechanical device.

This is also in sharp contrast to Claims 15, 16 and 25-28, wherein the divergent trailing edge is in a stationary, fixed position with respect to the internal wall of the nozzle. Thus, Claims 15, 16 and 25-28 employ a completely different and opposite means for controlling the propulsive gas mixing. The Applicants accordingly respectfully submit that McAndrews is in applicable to Claims 15, 16 and 25-28. Withdrawal of the rejection is respectfully requested.

The Applicants acknowledge the rejection of Claims 1, 2, 9 and 11-14 under 35 U.S.C. §102 over Birch. Claims 1, 2, 9 and 11-14 have been cancelled, thereby rendering the rejection moot.

Nonetheless, the Applicants respectfully submit that Claims 15, 16, 23 and 25-28 are patentable over Birch. Like McAndrews and Koff, Birch relies on a movable flap 20 which is completely different from the stationary, immovable divergent trailing edge set forth in Claims 15, 16, 23 and 25-28. Accordingly, the Applicants respectfully submit that Birch is inapplicable to those claims. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,

T. Daniel Christenbury
Reg. No. 31,750

TDC:vbm
(215) 656-3381